

January 2002

Gosh! I Always Wondered...

Follow this and additional works at: <http://jdc.jefferson.edu/scitechnews>

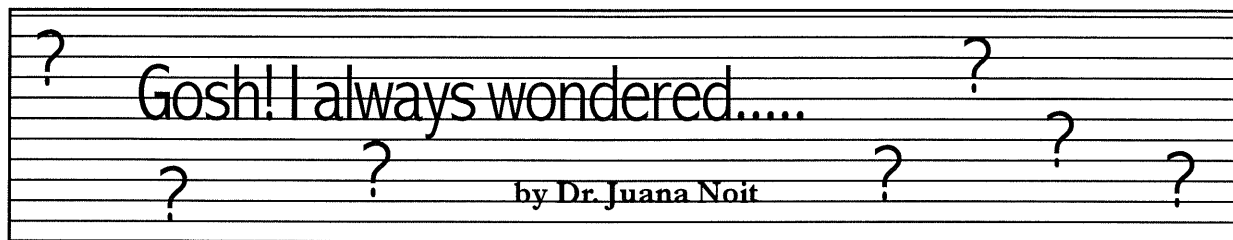
[Let us know how access to this document benefits you](#)

Recommended Citation

(2002) "Gosh! I Always Wondered...," *Sci-Tech News*: Vol. 56: Iss. 1, Article 6.

Available at: <http://jdc.jefferson.edu/scitechnews/vol56/iss1/6>

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in *Sci-Tech News* by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.



Han Solo and Luke Skywalker in deep space? Keanu Reeves dodging bullets in *The Matrix*? Harrison Ford hanging out of *Air Force One*? Isildur and Elrond in a fiery Mount Doom? Ripley and the Marines walking on an alien planet? Many of us enjoy losing ourselves in the movies, marveling at what we see, wondering how they do it. No, none of these characters were really in these places. But they looked like they were, thanks to special effects. As SLAers prepare to gather at the annual conference in Los Angeles, it seemed appropriate that our first “Gosh! I Always Wondered” will be a look at movie special effects—in this case, blue screens.

Blue screens don’t have to be blue; they can be any color but tend to be blue or green. The reason? Lots of blue screens are shot with people in the scene, and because it is easier to “extract” the blue without changing the person too much, that color is used the most. I guess that makes sense since we have more browns, reds, and yellows in our coloration in general, so blue can come out without too much change to our tones. But wait, what if we have blue eyes? Lots of people have blue eyes. Just look at those innocent blue eyes of Elijah Wood as Frodo Baggins in *The Lord of the Rings*. Lots of these scenes were filmed in front of blue screens, at least according to different television shows concerning the making of the movie. Well, I’m no special effects guru, I’m a librarian, but my research indicates you can even film blue against blue now because as long as the computer can distinguish between the two blues, it can do a quality extraction. Then you are left with the item or person you want and no background. The reason it works so well is the advancement in digital technology. It can easily distinguish blues and extract only the exact color you indicate. Not so at one time. Some of us may remember the funny blurs and disappearance of parts of news anchors when they had a blue screen behind them but wore the wrong clothes. We’ve come a long way!

Okay, we have our person doing something in front of a blue screen—let’s say running across an alien environment. Not very dramatic with a flat, blue background. However, here comes the magic. Program your computer to be blind to the exact blue color and it disappears. Now, sandwich this shot of your person running with the shots of your desired background. This background scene can be computer-generated, painted, or filmed, and your composite is the desired scene. Although the technique can be done on film, most composites are now done on computer since it is much easier to correct mistakes and edit for desired effect. You can even use several layers in your composite so your character is running across this new background that also includes, for added drama, a composite of explosions and a fierce extraterrestrial being in hot pursuit. Looks real, scary, and yet the actor never left the soundstage.

Blue screen is just one of a myriad of techniques used to create our favorite movies and television shows. Makes you wonder when you can really believe your eyes, doesn’t it?

Have a question? Send it to the editor and she’ll get it to me. Because we’re all librarians, we’re curious, and gosh, we always wondered.

For more information check out:

Richard Rickitt. *Special Effects: The History and Technique*. New York: Billboard Books, 2000.

Zoran Perisic. *Visual Effects Cinematography*. Boston: Focal Press, 2000.

Paul Wheeler. *Digital Cinematography*. Boston, MA: Focal Press, 2001.